

Application No.: 10/052,356

Docket No.: 20272-00700-US

REMARKS

Claims 1 and 3-16 are pending in the application. Claims 1, 3, 12, 13 and 14 have been amended. Claim 2 is cancelled herein.

Claim Amendments

Claims 1 and 13 have been amended to include the elements of original claim 2. Support for the amendments to these claims is provided in the paragraph beginning line 1 of page 2 of the originally filed specification, and in Figures 1-3 of the originally filed drawings. No new matter has been added.

Claims 3 and 14 have been amended to depend from claim 1, as claim 2 has been cancelled. No new matter has been added.

Claim 12 has been amended to correct an alleged informality. No new matter has been added.

Objection to the Drawings

Withdrawal of the objection to the drawings for failing to show the layer on the inside surface providing a tapering surface is respectfully requested. Applicant files herewith a copy of Figure 2 showing proposed amendments to include reference numeral 43 and to show the tapering surface on the part 42 of the layer 21.

Objections to the Specification

Applicant believes that the above-described amendments to the drawings also address the Examiner's objection to page 5 of the specification, as it is now clear that the outer region 43 is tulip-shaped and provides a manual gripping region.

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Objections to the Claims

Reconsideration and withdrawal of the objection to claim 12 due to informalities are respectfully requested. Claim 12 has been amended in accordance with the Examiner's suggestion to correctly claim "An assembly comprising a corrugated pipe and coupling".

Claim Rejections – 35 U.S.C. §102

Reconsideration and withdrawal of the rejection of claims 1-5, 7-10 and 13 under 35 U.S.C. §102(e) as being anticipated by US Patent No. 5,884,943 to Katzer et al. are respectfully requested.

The claimed invention provides an alternative pipe coupling and assembly that provides an effective seal between the coupling and the inserted pipe as well as a providing a firm gripping means for a user when the coupling is in use. The coupling of the invention, as defined in amended claim 1, comprises a housing of a relatively rigid plastics material, said housing having a bore therein; a retainer for retaining said pipe within said housing; and a layer of a relatively deformable material moulded onto at least a part of both an inner and outer surface of said housing, wherein said layer on said inner surface is adapted to form a seal with an outside of said pipe. Claim 13 recites a method of forming a coupling comprising the steps of: injecting a first material of a relatively hard plastics material to form a housing of said coupling with an integral retainer; and subsequently injecting a second, softer material to form a layer on said harder material both on an inside and outside of said housing, wherein said layer on said inside of said housing is adapted to form a seal with an outside of a pipe. The provision of the seal on the inner surface results in an improved seal and improved grip for the user when handling the coupling.

In order for anticipation to exist, a reference must teach each and every element of a claimed invention. "The identical invention must be shown in as complete detail as is contained in the... claim". *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920

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(Fed. Cir. 1989). Katzer et al. discloses a coupling for a garden hose comprising a body and a moveable sleeve that activates coupling clasp cams. The sleeve has a deformable material moulded thereon that extends on to the inner surface, to provide additional grip and protection for the coupling. Although the deformable material extends onto an inner surface of the hose coupling, it clearly does not, nor is intended to, seal against an inserted hose pipe. In fact, the coupling disclosed in Katzer et al. provides an alternative structure for receiving and sealing against the hose pipe as well as a connector nipple. Thus, Katzer et al. et al does not disclose or suggest a pipe coupling having a deformable material moulded onto inner and outer surfaces, and in which the layer on the inner surface is adapted to form a seal with an outside of a pipe, nor does it suggest or teach towards such a coupling.

Because Katzer et al. differs from the present invention for at least the reasons discussed above, Katzer et al., does not anticipate claims 1 and 13. Katzer et al. also does not anticipate claims 3-5 and 7-10 since these claims depend from claim 1.

Claim Rejections – 35 U.S.C. §103

Reconsideration and withdrawal of the rejection of claims 1-16 under 35 U.S.C. §103(a) as being unpatentable over US Patent 4,923,227 to Petty et al. in view of US Patent 5,884,943 to Katzer et al. is respectfully requested.

In order for a claimed invention to be obvious, all of the claim recitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 974). As stated above, Katzer et al. et al does not disclose or suggest a pipe coupling having a deformable material moulded onto inner and outer surfaces, and in which the layer on the inner surface is adapted to form a seal with an outside of a pipe. Petty et al. discloses a corrugated pipe coupling comprising a body having locking members and a tapering internal surface to form a close fit against an inserted pipe. Petty et al. suggests that a resilient seal may be provided to seal against the end or walls of an inserted pipe. However, Petty et al. does not disclose or teach toward providing a deformable layer that extends over the inner and outer surface of the coupling.

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Claims 1, 11, 12 and 13 as currently in the case recite that the coupling includes a layer of deformable material moulded onto its housing, that the layer extends onto "both an inner and outer surface of said housing"/ "both an inside and outside of said housing", and that the layer on the inner surface/inside of the housing is adapted to form a seal against an inserted pipe. These features are not shown or suggested in the prior art and allow the coupling to be manufactured efficiently while ensuring an effective seal between the coupling and a pipe as well as improved grip for a user on the outside of the coupling. None of the prior art cited discloses or suggests that the coupling could be formed in the manner as defined in independent claims 1, 11, 12 and 13 as now in the application. In fact, Katzer et al. teaches away from a deformable material on the inner surface of the coupling forming a seal with an outside of the pipe. Therefore, combining the teachings of Petty et al. and Katzer et al. to arrive at the claimed invention would amount to a destruction of the references, and such a combination could only be arrived at through the use of improper hindsight.

Therefore Applicant submits that claims 1, 11, 12 and 13 are allowable over Katzer et al. in view of Petty et al. Applicant further submits that claims 3-10 and 14-16 are not obvious since they depend from claim 1.

Conclusion

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. An early notice of allowance is earnestly solicited.

In connection with the filing of this Response, Applicant authorize payment of the three month extension of time fee (\$950.00) to be charged to our Deposit Account No. 22-0185, under Order No. 20272-00700-US from which the undersigned is authorized to draw.

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Dated: November 10, 2003

Respectfully submitted,

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Attachments